

Figure 6-4. Schematic of Leachate Migration From the Soil to a Stream

Explanation of Symbols

 $Q_{sw} =$ Stream flow upstream of the point of groundwater discharge[ft³/day]

 C_{su} = Concentration upstream of the groundwater discharge [mg/L]

 $Q_{gw} = Impacted groundwater discharge into the stream [ft³/day]$

 C_{sw} = Allowable downstream concentration, i.e., specific water quality criteria to be met beyond the mixing [mg/L]

 C_{gw} = Allowable concentration in the groundwater discharge to the stream [mg/L]

C_{gws} = Allowable concentration in the groundwater at the edge of the soil source [mg/L]

C_{soil} = Allowable soil concentration at the source [mg/kg]

 L_p = Width of groundwater plume discharging to the stream [ft]

D_p = Thickness of groundwater plume discharging to the stream [ft]

X_s = Distance from the downgradient edge of the groundwater source to the stream [ft]